



## A Clinical Practice Experience: Focus Groups for Prevention Activities with Adolescents

Michela Gatta<sup>1\*</sup>, Lorenza Svanellini<sup>1</sup>, Sofia Pertile<sup>1</sup>, Paolo C. Testa<sup>1</sup>,  
Giovanni Ceranto<sup>1</sup>, Manuela J. Difronzo<sup>1</sup> and Pier Antonio Battistella<sup>1</sup>

<sup>1</sup>Infancy Adolescence Family Unit, ULSS 16, Padua University, Padua, Italy.

### Authors' contributions

*This work was carried out in collaboration between all authors. Author MG designed the study, wrote the protocol and supervised the work with author PAB. Authors LS, SP, PCT and GC carried out all laboratories work and author MJD performed text and statistical analysis. Authors MG, LS and SP wrote the first draft of the manuscript and managed the literature searches and edited the manuscript. All authors read and approved the final manuscript.*

### Article Information

DOI: 10.9734/BJESBS/2016/22441

#### Editor(s):

(1) Chan Shen, Department of Biostatistics, University of Texas, USA.

#### Reviewers:

(1) Anonymous, University Hospitals of Geneva, Switzerland.

(2) Reinaldo B. Bestetti, University of Ribeirao Preto, Brazil.

(3) Jyotsana Shukla, Amity University, Lucknow, India.

Complete Peer review History: <http://sciencedomain.org/review-history/13315>

Clinical Practice Article

Received 1<sup>st</sup> October 2015  
Accepted 4<sup>th</sup> February 2016  
Published 16<sup>th</sup> February 2016

### ABSTRACT

**Aims:** This study had three main objectives:

- To identify the principal risk factors in psychiatric adolescents attending a Neuropsychiatric Unit in Padua (Italy) that provides daily psychiatric services for children and adolescents;
- To elucidate the thinking and reasons underlying the adolescents' risky behaviour;
- To seek protective factors and strategies for dealing with their unsafe conduct.

These objectives were developed in the light of content emerging during sessions held with a focus group. The statistical analysis for this study was conducted on a text analysis performed using the "Atlas.t" program.

**Methods:** This qualitative study used text analysis to investigate risk factors emerging from focus group (FG) sessions conducted with 11 psychiatric adolescents (6 girls and 5 boys, aged from 14 to 18, mean 15.5 years old) attending a daily psychiatric service. The FG met from January to April

\*Corresponding author: E-mail: [michela.gatta@unipd.it](mailto:michela.gatta@unipd.it);

2014, at the Family Unit for Children and Adolescents (ULSS 16) in Padua, for the purpose of conducting a secondary prevention activity, taking a psycho-educational approach to the young participants in the group. The FG sessions consisted of five fortnightly meetings lasting two hours each, which were co-conducted by a psychologist and an educator. The focus was on the adolescents' risky behaviour. A silent observer attended the sessions and wrote reports on the group. These reports were subsequently examined using a text analysis technique with the aid of the "Atlas.ti" software. This program identified the various topics of interest that recurred most frequently in the FG's discussions. The software was then used to generate an encrypted grid containing 14 thematic areas with a number of corresponding codes. This enabled us to ascertain how the themes were structured and developed during the various FG sessions.

**Results:** Our results show that the principal risk factors on which the adolescents focused were: unsafe sex, unsafe use of internet and drug abuse. In the adolescents' opinion, the main reasons for taking such risks included: curiosity, the urge to feel or try something new, and peer group influence. By the end of the FG sessions, among the strategies to use to protect themselves, they recognized the importance of talking with adults, more than talking with peers.

*Keywords: Adolescents; focus group; prevention activity; risky behaviour; psychiatric disorders.*

## 1. INTRODUCTION

Recent research has demonstrated that periods of transition in an individual's life are characterised by a higher likelihood of unhealthy conduct [1,2,3,4]. From a developmental standpoint, the most important transitional period in life is adolescence with the various complex changes it entails. Young people are particularly vulnerable during this time, and exposed to the risk of psycho-behavioural problems and experiences hazardous to their health. Puberty and the transition to high school are two important steps occurring at a delicate time when young adolescents may come into contact with alcohol and/or other substance use, for instance [4,2,5]. Clinical data show that the risky behaviour rate can increase when the complexity of adolescence is associated with psychiatric problems. Based on these premises, this study shows that the focus group (FG) technique, using a psychological and social semi-structured group intervention, can be used to provide support for adolescents with psychological disorders. This type of intervention could be seen as a form of "action research" because, while it seeks to clarify what meanings participants attribute to risky behaviour at this age, it may also induce some changes in the participants' attitudes (by prompting them to consider more carefully and discuss the meanings they attach to such behaviour). These FG group sessions were designed to create a useful "mental space" where our adolescents could think and talk about risky behaviour, possibly for the first time. They provided a new setting in which to think. The FG is a technique applicable as part of a qualitative assessment approach, used when the object of

the analysis consists of opinions, judgments or assessments. It is based on interviews conducted in a group setting on a given topic, that is explored in depth. In the FG intervention described in the present study, five sessions were held on the topic of risk-related behaviour defined as "intentional actions with no certain outcome, which imply negative consequences for health" [6,7].

According to the literature the most common forms of risky behaviour in adolescence are: alcohol consumption, tobacco and marijuana use, sexual debut, internet and social networks [8,9]. Our FG was consistent with secondary prevention activities and a psycho-educational approach. The sessions were organized in a room at the daily psychiatric service. The adolescent participants sat in a circle together with a psychologist, an educator and a silent observer. The idea behind the project was simple: to create a sort of family, an informal, pleasant and engaging environment for participants, who would be familiar with the setting in advance; we consider these features very important to the success of the intervention.

The main strength of our working group lies in the multidisciplinary nature of our team of psychologists, neuropsychiatrists and educators, who work with different, but integrated goals. The group's activities were planned by the whole team and the FG was co-conducted by a psychologist and an educator, with the important presence of a silent observer who generated the feedback on the FG sessions. At the end of each meeting, the silent observer discussed the most salient aspects that had emerged during the

session with the psychologist and educator. This was done in a separate room, without the adolescents taking part. It was only during the last FG session that the observer contributed to the group with his/her own comments. As for all other psycho educational and / or therapeutic activities performed at the daily centre, also for this one an informed written consent was collected by adolescents and their parents.

To better contextualise our study, the theoretical background taken for reference point is outlined below.

### **1.1 A Framework for Adolescence**

A psychosocial approach can be taken to the issues emerging in adolescence, with a view to discussing and focusing on specific problems that young people face. The topics involved often relate to the concept of “adolescent developmental tasks” [10,11,12,13,14], the most relevant of which are: puberty and sexual maturation; broadening social and personal interests; the achievement of hypothetical-deductive thinking; and, possibly, the construction of one’s personal identity and reorganization of one’s self-concept [10].

Another approach is based on neuroimaging, which enables the evolution and maturation of the brain to be explored [15,16]. It is interesting to study this aspect in order to better understand what happens in a youth’s brain in an effort to identify connections with adolescents’ behaviour.

In short, in the cognitive functioning of the brain, we can distinguish between cold and hot executive functions. The former rely on control and a slow cognitive information processing, enabling behaviour to be carefully controlled. They include working memory, planning, cognitive flexibility and inhibition (which can be seen as a part of cognitive control). The latter, hot executive functions belong to the affective part of the brain and are based on rapid automatic information processing. The problem is that the latter functions mature earlier than the former and this imbalance in the development of these two parts leads to higher likelihood of unhealthy behaviour during adolescence [16,15,17].

### **1.2 The Perception of Risk in Adolescence**

Based on current literature, a shared idea has emerged concerning adolescents’ risk

perception. The American Psychological Association [18] states that, “*young people sometimes overestimate their capacities to handle new situations, and these behaviors can pose real threats to their health*”. This type of attitude is known in the literature as “irrational optimism”, which is the behaviour whereby adolescents believe they will be immune to the negative consequences of any dangerous situations [19]. Seeking strong emotions and curiosity are factors that strongly affect young people’s risk perception [20]: the former prompts a constant search for new, intense sensory stimulations, while the latter is influenced by social and cultural factors, and by the peer group. Older adolescents, between 15 and 18 years old, encounter forms of risky behaviour more frequently than younger adolescents (11 to 14 years old) [21], and one study showed that 11- to 14-year-olds had a stronger risk perception than 16- to 17-year-olds or 20- to 29-year-olds [22]. Finally, a study conducted in Florida using the FG technique and thematic analysis showed that adolescents between the ages of 14 and 18 years need the constant presence of an adult in their lives: this should be a person they can depend on and trust, someone who can inform them about the health risks associated with their behaviour [23].

### **1.3 Risky Behaviour in Adolescence: Transition or Distress Signal?**

In talking about risky behaviour in adolescence, it may be hard to say when such behaviour should be considered the sign of a psychopathological condition, or of a constructive, exploratory developmental phase [24]. The difficulty lies in understanding when these actions are the expression of a natural need, a desire to grow up, to become independent, rather than a sign of individual, social or family distress. In the present study, the part played by the professionals in the FG was very important for the purpose of recognizing any early signs of psychopathological issues and preventing any short- or long-term exacerbation [18].

It is important to identify a boundary line when assessing signs of a “normal behaviour” and distinguishing this from cases with a “problematic condition”. As the literature shows, some degree of risk-taking in adolescence is a normal phenomenon, biologically determined and inevitable. It is normal for the majority of teenagers to feel the need to endanger their lives, and those of others, in order to feel fully

alive [18,15,25,10]. Risky or deviant behaviour in this age group may nonetheless also be a way of expressing discomfort, a call for help, or a need to change their condition [26]. It is fundamentally important, however, to consider the frequency of adolescents' risky behaviour, the setting and background for episodes of such behaviour, and the relationship between the adolescents involved and their living conditions and lifestyles [27].

## 2. METHODS AND PROCEDURE

The FG intervention consisted of 5 fortnightly sessions lasting 2 hours each, which were co-conducted by a psychologist and an educator.

The sessions were also attended by an observer who took notes in order to provide feedback afterwards on the group discussions. The observer's reports were analysed using the "Atlas.ti" text analysis software. An ad hoc encrypted grid was designed, covering 14 areas - called "families" - which were characterised as follows: *stories of others' experiences; risky behaviour; protective factors and strategies; experiences; behaviour; implications and consequences of risk-taking; homosexuality and affectivity; the concept of limit; the normal dimension of risk; alternatives...behaviour; homosexuality and marriage; Adolescence; homosexuality associated with ...; the choices made in adolescence are influenced by ...*. These 14 areas were identified on the grid by means of codes and the observer's reports were encoded by two independent judges. The number of text quotations analysed in this study amounted to 384 (with a 77% agreement between the two judges), and 317 quotations were encoded by both judges (with a 94% agreement).

The described intervention had three main aims:

- To identify the principal risk factors, focusing particularly on a group of problematic adolescents; it was assumed that the best way to identify these factors was to provide specific opportunities for meeting the adolescents and discussing what they considered risky behaviour and which kinds of situation they considered more dangerous;
- To shed light on the thoughts and reasons underlying the adolescents' risky behaviours; very often our participants had

acted impulsively, without thinking about their reasons for doing so. With our FG sessions we aimed to make patients think about the reasons behind adolescents' risky behaviour in terms of its apparent advantages and disadvantages. In that sense we think of awareness as a starting point, prompting reflection with a view to modifying one's own actions or thinking more carefully about them. In the present study, inducing in the young participants a greater awareness that they had usually acted without a real reason was one of the most important goals that we hoped to achieve. Learning to stop and think about our actions and behaviour can in itself be a useful tool for coping with life, especially during adolescence;

- Our third aim was to identify protective factors and strategies that adolescents could use to prevent risky behaviour. Once they had gained a greater awareness of what constitutes risky behaviour and when it can occur, the adolescents would be more able to predict and cope with such situations because they would have a better understanding of their underlying meaning.

## 3. RESULTS

The results obtained for each of the above-described thematic families are briefly reported in this section, identifying the codes in each family that proved to be the most important. All the families analysed with the Atlas.ti on the data emerging during the five sessions are shown in Fig. 1, where the scores correspond to the number of times (frequency) each topic was mentioned in the sessions.

Tables 1 and 2 summarize the results by family. The first column indicates the thematic area (family), in the same order as in Fig. 1; the second column the total number of codes belonging to a given family; the third column shows the codes identified as the most relevant; and the frequency of occurrence of each code is given in the fourth column.

The three aims of our study correspond to three fundamental family groups, identified in the table with an asterisk (\*). The findings for these three family groups are discussed in detail in the next section of the paper.

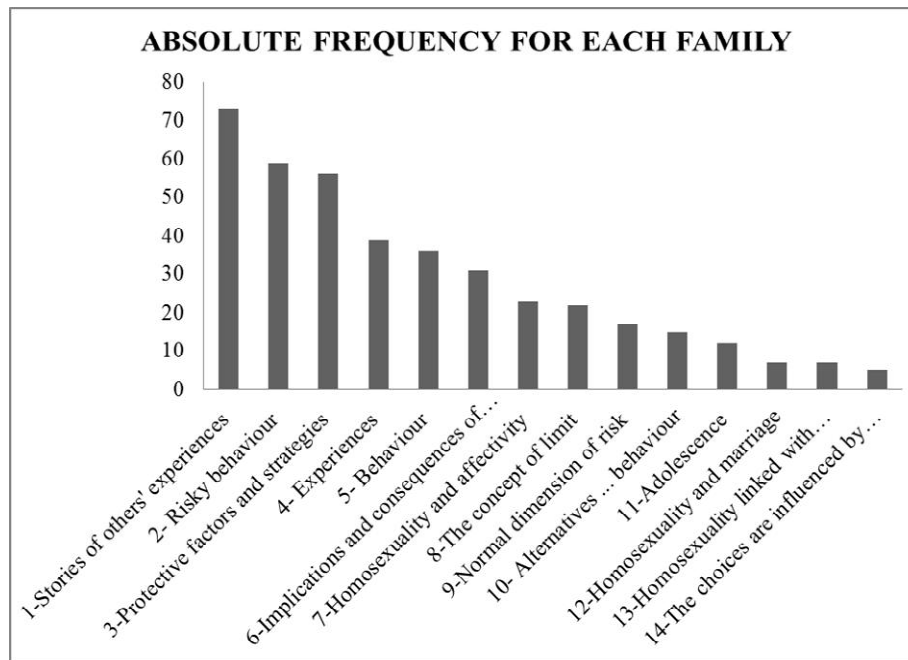


Fig. 1. Absolute frequency of occurrence for each family calculated on the total sessions

Table 1. Frequency of occurrence of each code calculated on the total sessions (Part I). (\*) Families discussed in section 4

Family	Total codes	Codes	Frequency
1- Stories of others' experiences	29	Peers are looking for risk	10
		Peers who use/abuse internet-social networks	9
		Aggressive peers	8
2- Risk behaviour (*)	22	Desire to be seen	8
		Curiosity	7
		Desire to be part of the group	6
		Experience of pleasure	5
3- Protective factors and strategies (*)	22	Talking with adults and asking them for help	12
		Talking with friends and asking them for help	10
		Reflecting and being aware before choosing	7
		Recognizing limits (self-regulation)	4
4- Experiences	28	Being victims of dangerous situations (cyber bullying, fights)	6
		Getting drunk	5
		Watching risky behaviour	4
5- Behaviour (*)	20	Unsafe sex	6
		Unsafe use of internet	5
		Use of drugs	4
		Use of alcohol	3

#### 4. DISCUSSION

##### 4.1 Principal Risk Factors

Judging from the recent literature, internet is becoming more and more potentially dangerous

for adolescents [28,29]. Our group considered it more alarming than drugs and alcohol. This is probably because, over time, an awareness of the risks of taking drugs and drinking alcohol has become well-established in society at large, but adults and adolescents alike are still unprepared

as concerns the web. In the opinion of our group of adolescents, alcohol appeared to be generally acceptable, partly because it is legal. Some of the adolescents were unconcerned about alcohol dependence, saying that they could stop whenever they wished. Others spoke of their own or a friend's personal experience in which alcohol abuse led them to try other illegal substances. These findings confirm previous reports in the literature [30].

During the first FG session, the group concentrated more on the concrete, practical meaning of risky behaviour. Conversations concentrated, for instance, on what types of behaviour are risky and what such behaviour involves. The concreteness of risk-taking and related types of behaviour emerged clearly thanks to the concepts on which the group had been asked to focus. At the very beginning, we noticed no thoughts concerning the real meaning of risky behaviour and no mention of any relevant personal experiences: risk-taking seemed to be seen as something impersonal that had to do with adolescence generally, but not with themselves personally.

#### **4.2 Thoughts and Reasons Underlying Risky Behaviour**

Our group of adolescents claimed that the motives behind risky behaviour can very often include the desire to make their presence felt or, as they put it, *"To be noticed and considered cool by peers"*, and a sense of curiosity, wanting to experience something new. One of the most often mentioned reasons seemed to be the desire to be part of a group (as emerges from the literature). Peer influence orients adolescents' decisions on the matter of risk-taking behaviour. Very often the adolescents in our FG were fairly well aware of the potentially negative effects of such behaviour, but their desire to experiment prevailed, possibly because of the euphoria associated with these kinds of behaviour and the situations in which they develop. The adolescents' curiosity was amplified by their need to go against the rules, and our adolescents recognized this as being typical of their age and related to the legal or parental limits imposed on them [30].

Given the significant peer influence in inducing adolescents' risky behaviour clearly emerged throughout our study, it seems a very appealing idea to adopt a strategy that exploits a group

setting and peers influence to prevent risky behaviour and promote healthy lifestyles.

During our second FG session, the group began to wonder about the meaning of risky behaviour. First they thought about why risk-taking sometimes seems to have such an appeal and what reasons lead up to this situation. This was when the adolescents began to think about risky behaviour in more depth.

#### **4.3 Protective Factors and Strategies**

Among the strategies they could use to protect themselves, the adolescents acknowledged the importance of talking with adults, judging it more important than talking with peers. This goes to show that, even in such a delicate period of transition as adolescence, when individuals seek to become independent, adults are still important reference figures for them. The role attributed to adults underscores some of the ambivalent sentiments experienced during adolescence, but adults continue to serve as an important model. According to our participants, adults (and parents especially) are very often responsible for their children's behaviour and choices. Their influence seems to remain important even when peer influence takes centre stage.

In the last FG session, having realized the meaning and the personal implications of risky behaviour, our young people talked about the strategies they could use to avoid it and protect themselves. This demanded an important further step in the way they thought about what they did and did not do, involving a process of mentalisation regarding certain impulsive behaviour.

To give an example, it is worth mentioning some of the quotations encoded under this thematic heading: *"A strategy to protect yourself? Don't withdraw, but share with someone older than you, like an adult ..."*; *"I talk to my best friend about everything"*; *"A behaviour might be risky, but it might not be if you are conscious of the risk and think carefully"*; *"You have to learn to recognize your body's alarm signals. For instance, if you are drinking and your legs get lighter, you've got to stop yourself"*.

#### **4.4 Stories of Personal and Others' Experiences**

When it came to personal experiences, the group seemed to be particularly exposed to risky

**Table 2. Frequency of occurrence of each code calculated on the total sessions (Part II)**

Family	Total codes	Codes	Frequency
6- Implications and consequences of risky behaviour	14	No feeling of pleasure	7
		Losing control of the situation	6
		Being unable to stop	3
7- Homosexuality and affectivity	11	It is disgusting	6
8- The concept of limit	13	More awareness	7
9- Normal dimension of risk	8	Risk-taking is normal	5
10- Alternatives ... behaviour	10	Playing sports	3
11- Adolescence	11	Amusing aspects	3
12- Homosexuality and marriage	6	Protecting children	2
13- Homosexuality linked with ...	3	Prejudice	4
14- Choices are influenced by...	3	Parents	3

situations relating to fights or cyber bullying. Alcohol consumption was counted as one of the most common types of risky behaviour, but it often seemed to be associated with the idea of a sort of therapy (drinking to avoid thinking about their problems) rather than as a source of amusement. These two aspects could be related to the fact that our sample consisted of adolescents with psychological disorders.

During the meetings, these adolescents told many of their stories in the third person, and we wondered how many of these stories were really related to their friends and how many referred to themselves. We assumed that adolescents used the third person to protect themselves from the other group members' judgement, as a defence mechanism. All the members of the group had a different life story, that was probably often too painful to speak about openly. Some of the narratives referring to a third party might conceal very similar or identical personal situations. The participants thus avoided exposing themselves, and being judged by their peers. Talking about other people in their stories was probably a way to project a part of their personal experience, and a part of themselves onto someone else, and this other person could protect the adolescent by deflecting any direct attack from the other members of the group.

During the third and fourth FG sessions, the adolescents began to talk more about themselves and their own experiences, moving away from their hitherto detached, impersonal way of considering risky behaviour and from the idea that the consequences of such behaviour "couldn't happen to them". This was evidence of a growing awareness of their personal proximity and exposure to risky situations, which developed over time, as the group came to realize that risk-taking and its consequences

were not something impersonal that only concerned others.

#### 4.5 The Concept of Limit

The concept of limit was very often associated with the adolescents' desire to exceed it, to seek excitement (e.g. drinking to become uninhibited, or to disobey the rules). When thinking about limits, the group agreed that exceeding the limits could be dangerous if they went too far. This prompted some considerations on what is 'normal' and what is 'excessive' - two concepts that are very relative, especially during adolescence. Understanding and thinking about the concept limit could have an important influence in motivating adolescents not to take severe risks.

Over the course of the five FG sessions, there was a different development and usage of the codes (topics) because the discussion enabled the group to think more about impulsive actions (as risky behaviour usually is), setting them in a "mental space" and making sense of them.

## 5. CONCLUSIONS AND IMPLICATIONS

We performed a new clinical experience based on a multi professional intervention, focus group type, aimed to deep risk behaviours awareness in fragile adolescents.

The type of activity conducted in this study seems to be a good example of very useful intervention both for getting to know adolescents better and for improving their awareness concerning their actions. Particularly, a goal of this study was also to contribute to the design of intervention to help prevent dangerous behaviour in adolescence.

It would be interesting to compare these results and other findings in the literature with a control group (e.g. adolescents attending high school, possibly scheduling sessions to be held at school) with a view to confirming whether the picture of risky behaviour and its meaning that emerged in our group applies to adolescence generally, or only to “psychopathological adolescence”.

One of the goals of this study was also to contribute to the design of intervention to help prevent dangerous behaviour in adolescence. On this aspect, it is worth considering the following points.

- a) Our FG intervention was effective because of core role of peer influence. Peer groups are important in influencing adolescents' behaviour, both negatively and positively, and their influence can be exploited to nurture a healthier lifestyle or a greater awareness when dealing with risky situations.
- b) Internet was identified as a specific risk factor, particularly as concerns web addiction, cyber bullying, and the unsafe use of social networks. Very often adults do not know enough about this complex world of potentially harmful and risky situations to be able to keep an adequate control over its use by adolescents.
- c) The involvement of “significant adults” continued to be seen as having a meaningful, important role in orienting young people's experiences, despite the contradictory signals that the former receive from the latter.

## ACKNOWLEDGEMENT

Presented data are related to a broader research project called The Lausanne Trilogue Play used as psycho-diagnostic and therapeutic tool in a Neuropsychiatric Unit: an innovative clinical experience working with psychiatric children and adolescents funded by the Italian Ministry of Health (GR-2010-2318865).

## COMPETING INTERESTS

Authors have declared that no competing interests exist.

## REFERENCES

1. Chappel AM, Suldo SM, Ogg JA. Associations between adolescents' family stressors and life satisfaction. *Journal of Child and Family Studies*. 2014;23(1): 76-84.
2. Gatta M, Facca I, Colombo E, Svanellini L, Montagnes S, Schiff S. Alexithymia, psychopathology and alcohol misuse in adolescence: A population-based study on 3556 teenagers. *Neuroscience & Medicine*. 2014;5:60-71. Published Online March 2014 in SciRes. Available:<http://www.scirp.org/journal/nm> <http://dx.doi.org/10.4236/nm.2014.51009>
3. Moksnes UK, Espnes GA, Haugan G. Stress, sense of coherence and emotional symptoms in adolescents. *Psychology & Health*. 2014;29(1):32-49.
4. Gatta M, Spoto A, Svanellini L, Lai J, Toldo I, Testa CP, Battistella PA. Alliance with patient and collaboration with parents throughout the psychotherapeutic process with children and adolescents: A pilot study. *Journal of Psychopathology*. 2012;18:28-34.
5. Latimer W, Zur J. Epidemiologic trends of adolescent use of alcohol, tobacco, and other drugs. *Child and Adolescent Psychiatric Clinics of North America*. 2010;19(3):451-464.
6. Bell NJ, Bell RW. *Adolescent risk taking*. London: Sage Publications; 1993.
7. Bell NS, Amoroso PJ, Wegman DH, Senier L. Proposed explanations for excess injury among veterans of the Persian Gulf War and a call for greater attention from policy-makers and researchers. *Inj Prev*. 2001; 7(1):4-9.
8. Maxwell KM. Friends: The role of peer influence across adolescent risk behaviors. *Journal of Youth and Adolescence*. 2002;31(4): 267-277.
9. Prinstein MJ, Boergers J, Spirito A. Adolescents' and their friends' health-risk behavior: Factors that alter or add to peer influence. *Journal of Pediatric Psychology*. 2001;26(5):287-298.
10. Albiero P. *Il benessere psicosociale in adolescenza. Prospettive multidisciplinari*. Roma: Carocci; 2012.
11. Piaget J, Inhelder B. *De la logique de l'enfant à la logique de l'adolescent*. Firenze: Giunti Barbera; 1971.
12. Erikson EH. *Gioventù e crisi d'identità*. 167-246. Roma: Armando Armando; 1974.
13. Esposito C. *Adolescenza. Tra conservazione e rivoluzione*. In E. Mangini, editor. *Lezioni sul pensiero post- freudiano*.



- 491-524. Milano: LED- Edizioni universitarie di Lettere Economia Diritto; 2003.
14. Vianello R. Psicologia dello sviluppo: infanzia, adolescenza, età adulta, età senile. Bergamo: Edizioni Junior; 2004.
  15. Steinberg L. A social neuroscience perspective on adolescent risk-taking. *Developmental Review*. 2008;28:78-106.
  16. Poletti M. Sviluppo cerebrale e funzioni esecutive in adolescenza. In Albiero P, editor. *Il benessere psicosociale in adolescenza. Prospettive multidisciplinari*. Roma: Caracci; 2012.
  17. Galvan A, Hare AT, Parra EC, Penn J, Voss H, Glover G, Casey BJ. Earlier development of the accumbens relative to orbitofrontal cortex might underlie risk-taking behavior in adolescents. *The Journal of Neuroscience*. 2006;26(25): 6885-6892.
  18. APA. A reference for professionals: Developing adolescents. American Psychological Association. Washington DC; 2002.
  19. Cicognani E, Zani B. *Psicologia clinica dello sviluppo*. Bologna: il Mulino; 1999.
  20. Steinberg L. Risk taking in adolescence. What changes, and why? *Annals of the New York Academy of Sciences*. 2004; 1021:51-58.
  21. Gullone E, Moore S, Moos S, Boyd C. The adolescent risk-taking questionnaire: Development and psychometric evaluation. *Journal of Adolescent Research*. 2000;15: 231-250.
  22. Haase CM, Silbereisen RK. Effects of positive affect on risk perceptions in adolescence and young adulthood. *Journal of Adolescence*. 2011;34:29-37.
  23. Kadivar H, Thompson L, Wegman M, Chisholm T, Khan M, Eddleton K, Muszynski M, Shenkman E. Adolescent views on comprehensive health risk assessment and counseling: Assessing gender differences. *Journal of Adolescent Health*. 2014;55:24-32.
  24. De Matos MG, Simoes C, Sacchi D. Adolescenti, stile di vita e salute: Ricerca e intervento. *Psicoterapia cognitiva e comportamentale*. 2004;10(2):133-150.
  25. Hachet P. *Adolescence et risques*; 2009. Accessed 14 March 2014. Available: <http://www.yapaka.be>
  26. Moro MR, Visier JP. Puberté normale et pathologique. Maturation et vulnérabilité, module 3, modules transversaux. *Objectif* 38; 2008. Accessed 14 March 2014. Available: <http://www.medecine.ups-tlse.fr/dcem3/module03/16.%20PUBERTE%203-38.pdf>
  27. Bonino S, Cattellino E, Ciairano S. *Adolescenti e rischio. Comportamenti, funzioni e fattori di protezione*. Firenze-Milano: Giunti; 2003.
  28. Milani L, Osualdella D, Di Blasio P. Quality of interpersonal relationships and problematic internet use in adolescence. *Cyber Psychology & Behavior*. 2009; 12(6):681-684.
  29. Potenza MN, Wareham JD, Steinberg MA. Correlates of at-risk/problem internet gambling in adolescents. *Journal of the American Academy of Child and Adolescent Psychiatry*. 2011;50(2): 150–159.
  30. Gatta M, Gatto Rotondo MC, Svanellini L, Lai J, Salis M, Ferruzza E. Focus groups as a means for preventing adolescent alcohol consumption: Qualitative and process analysis. *Journal of Groups in Addiction & Recovery*. 2015;10:63-78.

© 2016 Gatta et al.; This is an Open Access article distributed under the terms of the Creative Commons Attribution License (<http://creativecommons.org/licenses/by/4.0>), which permits unrestricted use, distribution, and reproduction in any medium, provided the original work is properly cited.

*Peer-review history:*  
*The peer review history for this paper can be accessed here:*  
<http://sciencedomain.org/review-history/13315>